This report describes a computer-assisted writing laboratory project integrating Model Curriculum Standards (teacher-developed instructional literature guides integrating the reading of core pieces of literature with the writing process), the writing process, computer hardware and software, and staff development. The report estimates that in the second year of the project (1988-89) 20,000 students at 18 junior and senior high schools in the Sweetwater Union High School District (Chula Vista, California) will rotate through the 36 laboratories and complete a variety of writing assignments allowing them to incorporate revision as a natural part of writing and allowing the 250 teachers to respond more to content and text-level issues. The report also describes the 3-year evaluation plan for the project. Appendixes include a list of 41 literature-based writing assignments, the results of a survey of teachers in the project, and excerpts from student evaluations. (RS)
THE SWEETWATER MODEL FOR WRITING IMPROVEMENT

SUSAN D. HEAD

INTRODUCTION

Writing is hard work. Forming ideas and committing them to print frustrates professional writers as well as students. Idea processors and prewriting activities help answer the "What do I write about?" question. Word processors simplify the struggle to get words down on paper. Spelling checker software saves considerable embarrassment and reinforces spelling skill in general. Postwriting tools scan documents, identify a surprising number of rhetorical concerns, and provide specific technical feedback on writing before the final draft is produced. Even with new technology, students should be coached in strategies of writing— as always. No machine will ever replace human reasoning and imagination in creating or responding to the writer's level of craft. With the commitment of Lottery funds, students in the Sweetwater Union High School District now have an opportunity to use tools that make revision a natural part of writing rather than a chore. Finally, with students assuming more of the responsibility for the mechanics of writing, teachers have the opportunity to respond more to content and text-level issues.

The Writing Process

| P -- | Prewriting, brainstorming clustering, listing, journals |
| O -- | Organizing, shifting, changing, choosing, outlining |
| W -- | Writing |
| E -- | Editing |
| R -- | Revising, justifying, changing, sharing, responding |

Electronic Tools

- Idea processors
- Word processors
- Writing Analysis and Spell Checker

PROJECT DESIGN

To maximize the use of technology for writing improvement in the Sweetwater Union High School District, the computerized writing lab project integrates Model Curriculum Standards, the writing process, computer hardware and software, and staff development. English teachers schedule their classes into the writing labs on a rotation basis to complete literature-based writing assignments, poetry units, research papers, and other course required writing activities. Word processing, spelling checkers, and writing analysis software—the generic productivity tools of today’s high tech society—facilitate the revision and editing steps of the writing process.

IMPLEMENTATION

During the 1987-88 school year, a 36-station computerized writing-improvement lab was installed in 18 junior and senior high schools; 12 labs were Macintosh computers and 6 labs were...
Apple II computers. Almost 200 English teachers and 25 instructional aides completed an average of 10 hours of training in computer operation and lab management. Almost 16,000 students in grades seven through twelve received orientation training in using the writing labs and completed a variety of literature-based original writing assignments.

As of September, 1988, all labs are operating at 90-110% capacity including before school, lunch, and/or after school at several sites. Estimates are that almost 250 English, RSP, and/or ESL teachers and over 20,000 students will use the writing labs this year to complete major writing assignments. Additional staff development in techniques and strategies for using the writing labs and telecommunications are scheduled for the spring semester to further enhance the writing experience.

EVALUATION

Curriculum improvement and program implementation must be accompanied by ongoing evaluation. The three-year evaluation plan comprises process evaluation of simple descriptive statements on lab usage, implementation of curriculum, staff development, and student/staff attitudes and product evaluation of student achievement data collected through the direct writing assessment of district and state tests. The evaluation results serve for program improvement each year through 1991.

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Sweetwater Union High School District
1130 Fifth Avenue
Chula Vista, CA 92011
INTRODUCTION

Writing is hard work. Structuring ideas and committing them to print frustrates professional writers as well as students. The writing process and computer hardware and software open the door to improved writing skill for writers of all ages. Idea processors and prewriting activities help overcome the "What do I write about?" hurdle (Classroom Computer Learning, October, 1986). Word processors simplify the struggle to get words down on paper. Spelling checker software saves considerable embarrassment and reinforces spelling skill in general. Postwriting tools scan documents, identify a surprising number of rhetorical concerns, and provide specific technical feedback on writing before the final draft is produced. Even with new technology, students should be coached in strategies of writing--as always. No machine will ever replace human reasoning and imagination in creating or responding to the writer's level of craft. With the commitment of Lottery funds, students in the Sweetwater Union High School District now have an opportunity to use tools that make revision a natural part of writing rather than a chore. Finally, with students assuming more of the responsibility for the mechanics of writing, teachers have the opportunity to respond more to content and text-level issues.

The Writing Process

<table>
<thead>
<tr>
<th>Process</th>
<th>Electronic Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>P (Prewriting)</td>
<td>Idea processors</td>
</tr>
<tr>
<td>O (Organizing)</td>
<td>Word processors</td>
</tr>
<tr>
<td>W (Writing)</td>
<td>Writing Analysis and Spell Checker</td>
</tr>
<tr>
<td>E (Editing)</td>
<td></td>
</tr>
<tr>
<td>R (Revising)</td>
<td></td>
</tr>
</tbody>
</table>

To maximize the use of technology for writing improvement in the Sweetwater Union High School District, the computerized writing labs were designed to include the following components:

1. A Definition of Writing Labs
2. Goals and Objectives
3. Model Curriculum Standards
4. The Writing Process
5. Software and Hardware
6. Staff Development
A DEFINITION OF A COMPUTERIZED WRITING-IMPROVEMENT LAB

The focus of the computerized writing-improvement labs differs from other types of computer labs. The writing lab is designed to enable students to produce original writing based on student interpretation, reaction, and/or analysis of core literature. The writing lab is not just a word processing center. Word processing facilitates the recording, revising, and printing of students' writing assignments. Use of spelling checker and writing analysis software during the revision and editing steps of the writing process provide feedback to the students on the mechanics and structure of their writing; this in no way replaces the teacher but is intended to reinforce, enrich, and facilitate the writing process. This computer lab model enables the teacher and the instructional aide to provide higher level instruction and support services to students on the content and style of their writing.

GOALS AND OBJECTIVES

Through long-term commitment and investment in people, curriculum, and computers, the following goals and objectives will be achieved:

1.0 Staff will design and implement a district-wide instructional plan which integrates staff development, curriculum, and computer hardware and software for English teachers.

1.1 Staff will implement a training program for Language Arts lead teachers, instructional aides, and English teachers at each site.

1.1.1 Staff will identify a district Trainer of Trainers with a combination of educational technology and language arts experience.

1.1.2 Staff and the Trainer of Trainers will design training curriculum, schedule, and train one lead teacher and one instructional aide per site in the operation of the computer, use of software, trouble-shooting techniques, repair procedures, and organization and management of software.

1.1.3 Staff and the Trainer of Trainers will assist lead teachers in training an average of 10 English teachers per site in the operation of the computer, use of software, trouble-shooting techniques, repair procedures, and organization and management of software.

1.1.4 Staff and the Trainer of Trainers will meet with lead teachers at least 4 times during the year to solve problems and network instructional ideas.

1.2 Staff will coordinate the installation of computerized writing labs at each site.
2.0 Students will improve direct writing skills and perceived value of writing.

2.1 Students read a core of quality literature in language arts classes.
2.2 Students compose original writing based on reaction, interpretation, and/or analysis of core literature.
2.3 In the direct writing assessment of CAP 8 and 12, the overall school scores in rhetorical, feature, and conventions will increase by 2% the first year of implementation; 3-5% the second year; and 5-10% the third year.
2.4 In the writing sample of SOAR exams, the overall school score will improve by 5% the first year of implementation; 10% the second year; and 10-20% the third year.
2.5 In the CTBS direct content objectives of Spelling, Language Mechanics, and Language Expression, the overall school scores will meet or exceed the national rate of learning for one year of instruction during each year of a three-year implementation study.
2.6 The number seniors who pass the English screening test (Subject A) for entry into the California State University system and/or the University of California system will increase by 5% the first year of implementation; 10% the second year; and 15% the third year.

3.0 English teachers will use model curriculum standards and the writing process and value the computer hardware and software as an instructional tool.

3.1 Teachers will integrate Model Curriculum Standards for reading literature and the writing process into all English classes.
3.2 Teachers will provide supportive and progressive instruction in mechanics of writing through the use of spelling checker and writing analysis software (spelling, grammar, punctuation, style, and word usage) for seventh through twelfth grade students.
3.3 Teacher attitudes toward using technology as a writing improvement tool will be positive and enthusiastic.

PROGRESS TO DATE

Model Curriculum Standards - During the last two years, a small but growing group of language arts teachers have participated in the California Literature Project and attended district-sponsored workshops. Talented high school and junior high/middle school teachers have produced almost thirty instructional literature guides which integrate the reading of core pieces of literature with the writing process. As soon as the writing lab was installed at each site, students at all grade levels began using the lab to complete a variety of original writing based on reaction, interpretation, and/or analysis of core literature (see Appendix A). English teachers received copies of the following materials through this project and/or a related mentor teacher project conducted by Kathy Guilfoyle, a teacher at Castle Park High School:


LITERATURE WRITING GUIDES: Into, Through, and Beyond for Grades 9-12 produced by district English teachers, edited by Kathleen Guilfoyle, and compiled by Susan Head; Volume II is scheduled to be compiled and distributed to teachers by October, 1988.

COMPUTERIZED WRITING-IMPROVEMENT LABS


The Writing Process - The major staff development program for 1987-88 and 1988-89 - Writing Across the Curriculum (WAC) and "Teaching Through Learning Channels (TTLC) insures that language arts teachers receive training in the writing process. The following schools completed WAC training during the 1987-88 school year:

Castle Park Middle, Chula Vista High, Hilltop High, Montgomery High, Mar Vista Middle, and Palomar High Schools

Software and Hardware - Criteria for selecting hardware and software is no different from the process used in curriculum revision. The first question should be, "What do we want to teach using our microcomputers?" When the curricular goals have been established, the second question is, "What software programs will best meet our needs now and in the future?" The hardware question is easier to answer after the first two have been addressed. There is no single best hardware path, but the choices become clear if the curricular and software issues are resolved first.

In response to the first question, model curriculum standards and the framework provide the focus and direction of the Language Arts instructional program. As stated in English-Language Arts Framework (1987: p. 3), educational reform calls for (1) a literature-based program "that emphasizes the integration of listening, speaking, reading, and writing" and (2) a writing program which stresses "the writing process—from prewriting through postwriting and from fluency and content through form and correctness."

To answer the second question of what software will best meet that need, a series of demonstrations were scheduled during the spring semester of 1986-87 school year to review the following programs:

1. Several commercially produced programs with a word processor and prompted writing activities.
2. A simple word processor and Writer's Workbench writing analysis from AT&T.
3. SMART writing analysis from NCR.
4. MacWrite word processor, Thunder spelling checker, and MacProof writing analysis for Macintosh.
5. AppleWorks and FrEdWriter word processors, Webster's Spelling checker, and GhostWriter writing analysis for Apple IIe/GS.

Some of the features considered were ease of use, operational features, degree of sophistication, unit cost, availability of license agreements, long-term adaptability to various domains of writing, ease of management, compatibility with existing applications, and support materials. Several pricing models compared costs of various lab configurations. With limited funds, staff and teachers wanted to maximize the number of workstations and the amount of software available in the labs.

The initial recommendation for computerized English writing labs consisted of word processing software and Apple IIe computer hardware. Additional research revealed the availability of several new writing improvement software tools which are used in conjunction with a basic word processing system. These writing improvement tools greatly enhance the editing step of the writing process by enabling the writer to check spelling, grammar, and punctuation as well as obtain feedback on sentence length, reading level, paragraph expansion, and so on.
Writing Lab Configurations - The following table summarizes the hardware and software installations by site:

<table>
<thead>
<tr>
<th>Macintosh</th>
<th>Apple II</th>
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<tbody>
<tr>
<td>9 High Schools</td>
<td>6 Junior High Schools</td>
</tr>
<tr>
<td>3 Junior High Schools</td>
<td></td>
</tr>
<tr>
<td>Macintosh Plus/SE</td>
<td>Apple II or GS</td>
</tr>
<tr>
<td>MacWrite word processing</td>
<td>AppleWorks or FrEdWriter word processing</td>
</tr>
<tr>
<td>Thunder spelling checker</td>
<td>Webster’s New World Spelling Checker</td>
</tr>
<tr>
<td>MacProof writing analysis</td>
<td>Ghost Writer writing analysis</td>
</tr>
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</table>

Cost of Writing Labs - Over a million dollars in Lottery funds was allocated by the board to establish a writing improvement lab at each of the 18 schools in the district. Lab configurations and facility needs vary from site to site. Room modifications include electrical, furniture, networks for six sites, painting, and other remodeling. Site allocations provide day-to-day operational supplies. Costs vary depending on site needs and high-volume purchases of hardware and software. The estimated costs are:

<table>
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<tr>
<th>Estimated Costs for Eighteen 36-Station Labs:</th>
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<tbody>
<tr>
<td>Hardware</td>
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<tr>
<td>Software</td>
</tr>
<tr>
<td>Network Systems</td>
</tr>
<tr>
<td>Furniture</td>
</tr>
<tr>
<td>Electrical/Remodeling</td>
</tr>
<tr>
<td>Total Lottery Fund Allocation for Labs</td>
</tr>
</tbody>
</table>

Cost for Staff Development

| Trainer of Trainers - Special Half-time Assignment for 1987-88 school year | $20,000 |
| Fall Workshops                                                             |          |
| 18 lead teachers x 16 hours x $20                                         | $5,760   |
| 18 instructional aides x 8 hours x $10                                     | $1,440   |
| Instructional Materials                                                   | 500      |
| Spring Workshops and Follow-up Training                                   |          |
| 10 teachers x 18 sites x 12 hours x $20                                   | $43,200  |
| Total Lottery Funds for Staff Development                                 | $70,900  |
| SUBTOTAL                                                                  | $1,120,900 |
| Total Site Allocation for Supplies                                         | $40,000  |
| GRAND TOTAL                                                               | $1,160,900 |

Staff Development - Training English teachers to use the computerized writing labs is a crucial component for the successful implementation of the labs. Lottery funds were allocated for a half-time Trainer of Trainers, curriculum development, and training activities using the "pyramid plan" illustrated below. The Trainer of Trainers provided instruction for Lead Teachers and Instructional Aides during the fall semester of 1987. Lead Teachers continued training and in turn trained site English teachers with assistance from Susan Head, Teacher on Special Assignment for Educational Technology and Magnet Programs, Carmen Plank, Bilingual Educational Leader and Trainer of Trainers, and instructional aides. English teachers in turn trained the students with assistance from instructional aides. Preliminary figures indicate that approximately 18 Lead Teachers, 180 English teachers, and 20 instructional aides received an average of 8-10 hours of training.
The training plan for the writing labs includes the following components:

- **Phase I**: Computer Operation, Word Processing, and Lab Management
- **Phase II**: Spelling Checker, Writing Analysis, and Review
- **Phase III**: Techniques and instructional Strategies
- **Phase IV**: Techniques and Instructional Strategies Continued, Network Systems, and Telecommunications

Almost 200 English teachers and 25 Instructional aides completed an average of 10 hours of training in computer operation and lab management as presented in Phase I and Phase II of the training plan described above. In June, 1988, over 62% of the English teachers surveyed indicated that prior to this project they had no computer training or knowledge of how to use a computerized writing lab (see Appendix B). After completion of Phase I and Phase II training, over 82% of the teachers felt significantly more comfortable and confident to use the writing labs. Teacher response to the training and using the labs for writing improvement has been very positive and enthusiastic. Carmen Plank, Trainer of Trainers, and the Lead Teachers are to be commended for their efforts.

Almost 16,000 students in all grade levels received orientation training in using the writing labs and completed a variety of literature-based original writing assignments (see Appendix A). Student reaction to the training and the writing assignments is also very positive (see Appendix C). Site English teachers are to be commended for their training and instructional efforts.

Once the basic computer skills are mastered, teachers need and want information and instructional models which specifically integrate reading, writing, and computers. Phase III of training enabled computer-using English teachers to share successful techniques, instructional strategies, and additional literature-based lesson plans. During May and the first of June, almost 50 English teachers attended Sessions 1 and/or 2 of Phase III of training to hear presentations by:

- David Kuhn, MVH, on the writing process
- Jackie Montierth, SOJ, on the development and use of TEACHING WRITING WITH COMPUTERS
- Judy Flisher, SOJ, on instructional strategies for the lab
- Pris Hamilton, SCH, on Les Misérables and Cyrano de Bergerac
- Jennie Warner, MOH, on publishing student writing and using PageMaker to produce literary magazines
- Carmen Plank, BVJ, and Alexis Ancona, Instructional Aide at BVJ, on producing a writing lab
Time constraints this year prevented the scheduling of additional sessions for Phase III and training and sessions for Phase IV. It is hoped that mentor teachers will provide support services for these higher-level activities during the 1988-89 school year.

Project Dissemination - Articulation enables teachers, site and district administrators, community leaders, and staff in other school districts to understand the vision, design, structure, and coordination required to implement an exemplary technology project on the scale of this one. Using flip charts and/or a computer-generated slide show and samples of the training materials and literature-based writing guides, presentations highlight every aspect of the writing lab project from conception to implementation. Presentations were for:

- Staff in the English/Language Arts Department at Southwestern College
- Community Leaders at Castle Park High School
- Staff from Fullerton Joint Union High School District
- Staff from Kern Union High School District
- Staff from Ocean View School District
- Staff from Santa Ana Unified School District
- Computer Using Educators Conference at Torrey Pines High School
- Members of the Curriculum and Instruction Committee
- Parents at Bonita Vista Junior High School
- Writing Lab Lead Teachers
- English teachers at Bonita Vista Junior High, Chula Vista Junior, Hilltop Junior High, Chula Vista High, Mar Vista High, Montgomery High, Palomar High, and Sweetwater High Schools
- Members of the Apple Support Coordinators in Newport Beach

Additional presentations are tentatively scheduled for:
- Computer Using Educators Conference in San Jose in October, 1988
- Association for Development of Computer-Based Instructional Systems in November, 1988

As a result of sharing our writing lab project, Southwestern, Fullerton, Kern, Ocean View, and Santa Ana have taken steps to establish writing labs based on our project.

TIME LINE

Integration of the writing lab into the traditional classroom instructional program needs to be phased in over several semesters to move students to more sophisticated levels of usage and writing improvement. As with all training, participants move from awareness, to concept, to skill, and finally to application level. The trainer and eventually the classroom teacher present, describe, demonstrate, model, provide practice and feedback, coach, and support participants along the way. The following time line lists major activities leading to full implementation and program evaluation:

Fall 1987
1. Install and organize hardware and software.
2. Present Phase I of training on computer operation, word processing, and lab management to Lead Teachers and Instructional Aides.
3. Train site English teachers.

Spring 1988
1. Orient students to conduct, rules, and procedures for using the facility, hardware, and
software.
2. Train students to use the word processing software as they complete writing activities.
3. Present Phase II of training on spelling checker, writing analysis, and review to Lead Teachers and Instructional Aides.
4. Train site English teachers.
5. Reinforce lab procedures for consistent and efficient lab operation.
6. Train students to use the spelling checker software as a part of the editing step of the writing process keeping it simple at first and progressing from simple to complex skill development.
7. Train students to use only one or two features of the writing analysis software.
8. Present Phase III of training in techniques and instructional strategies sessions to all English teachers and Instructional Aides to integrate literature, the writing process, and use of computerized writing labs.

Fall 1988 and subsequent years
1. Continue to reinforce lab usage procedures.
2. Continue to integrate spelling checker features into the editing step of the writing process.
3. Continue to integrate other writing analysis features into the writing activities.
4. Continue to present Phase III of training in techniques and instructional strategies sessions to all English teachers and Instructional Aides to integrate literature, the writing process, and use of computerized writing labs.
5. Implement training for new language arts teachers in use of writing labs.
6. Present Phase IV training in additional techniques and instructional strategies, network systems, and telecommunication.

STAFFING

The organization of the writing labs and the training are designed to enable English teachers to operate independently in the labs. Several staffing options may be available to sites to make the lab environment more efficient and accessible to students:

1. Allocate one instructional aide per site to provide language support services to students and to assist the language arts teachers by organizing materials and maintaining the lab.
2. Provide a teacher to operate the lab after school 5 hours per week at each site from the seven-period day allocation.
3. Allocate categorical funds to provide support services and staff before and after school and/or during lunch time for eligible students.
4. Assign a student worker to provide support services in the lab each period of the day.

EVALUATION

Curriculum improvement and program implementation must be accompanied by ongoing evaluation. This process provides information to the schools and the community about accountability for funding support and for future program improvement.

The evaluation plan comprises two major components: The Process Evaluation and the Product Evaluation. Included in the process evaluation are simple descriptive statements on lab usage, implementation of curriculum, staff development, and student/staff attitudes (see Appendices A, B, and C). Product evaluation, on the other hand, focuses on student achievement data collected through the direct writing assessments of CAP and SOAR tests, the objective portion of CTBS, and the
number of students passing the Subject A tests in grade 12. Staff in Testing and Evaluation are presently preparing baseline test data from the 1986-87 and 1987-88 school years. The evaluation results serve for program improvement. An annual evaluation report will be submitted to the board, site administrators, and English teachers for review and recommendations for program improvement.
Appendix A

A June 10, 1988, survey of lead teachers reveals that junior high/middle school and senior high school students use the writing labs to complete a variety of literature-based assignments:

- Character interpretation and evaluation
- Autobiographical and biographical essays
- Paragraphs and reports in Spanish and French
- Research papers
- Diamante, haiku, sonnets, and free verse poetry
- Character evaluation and interpretation based on Cyrano de Bergerac and Gulliver's Travels
- Newspaper writing based on Les Miserables
- Interviews and articles for school newspapers
- Critical essays on English novels
- Creative writing assignments
- Character analysis based on Romeo and Juliet, To Kill A Mockingbird, Red Badge of Courage, Animal Farm, and Fahrenheit 451
- Newspaper writing based on ads, Dear Abby, editorials, letters to the editor, and so on
- Short stories
- Book reports
- Autobiographical incident based on A Gift
- Research paper based on biographies
- Sentence combining activities
- Letter writing to sixth grade teacher comparing and contrasting the differences between junior high and elementary school
- Newspaper writing based on Shakespearean letters
- Newspaper writing from Roman times based on Julius Caesar
- Newspaper writing based on an alien visiting the writing lab
- Essay using conversation about a seed becoming a flower
- Problem/Solution essays focusing on the point of view of a character in Of Mice and Men, The Outsiders, Where the Red Fern Grows, Sounder
- Use of irony in "The Ransom of Red Chief"
- Report of details from a character's point of view based on Tom Sawyer, The Adventures of Ulysses, Diary of Anne Frank
- Cause and effect essay based on Animal Farm
- Essays based on myths, The Romancers, 12 Angry Men, Helen Keller, Old Man and the Sea, Lord of the Flies, and In Our Time
- Thank you letters for Career Day speakers
- Welcome letters for incoming seventh graders
- Essays of dramatic irony based on Romeo and Juliet
- Letters to congressman
- Get-well letters to a fellow student
- Diamante character poems
- Book report essays on Of Mice and Men, The Rye, and Great Expectations
- Essays for the final examination
- Persuasive essays on Open Campus
- Outlines
- Essays interpreting theme based on The Grapes of Wrath
- Preparation of site and district literary/art publications
- Short stories
- Essays based on current events such as AIDS, teenage pregnancy, and so on
Appendix B

Computerized English Writing-Improvement Labs
1987-88 Project Evaluation

To evaluate the computerized English writing-improvement lab project this year, your thoughtful appraisal of the training and support services is needed. Please complete and return to Susan Head, Instructional Support Services, by June 10, 1988.

Number of Persons Responding = 112 out of 225 for 49.3% Response Rate
Values given as percentages of item response.

1. My job status is:
   a. Lead teacher 16.2%
   b. English teacher 73.0%
   c. Instructional aide 8.1%
   d. Other 2.7%

2. Prior to training, my ability to use a computer was best described as:
   Low 32.4% 14.4% 23.4% 14.4%

3. After training, my ability to use a computer is best described as:
   Low 0.0% 17.1% 45.9% 36.9%

4. Prior to training, my knowledge of how to use a computerized writing improvement lab was best described as:
   Low 45.0% 24.3% 16.2% 14.4%

5. After training, my knowledge of how to use a computerized writing improvement lab is best described as:
   Low 0.0% 10.7% 45.5% 43.8%

6. Intrinsic Value: To what degree do you feel this project will improve student writing performance?
   Low 0.9% 7.1% 31.3% 60.7%

7. To what degree do you feel this project will improve student attitudes about writing?
   Low 0.0% 1.8% 33.9% 64.3%

8. Relevance: To what degree do you feel this project has changed your expectations for student performance in the computerized writing improvement lab?
   Low 0.0% 13.5% 45.2% 41.3%
9. **Applicable**: To what degree do you feel the training for this project can be readily applied to your current teaching situation in the computerized writing improvement lab?

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<th>2</th>
<th>3</th>
<th>4</th>
<th>High</th>
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<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td>0.0%</td>
<td>5.6%</td>
<td>32.7%</td>
</tr>
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</table>

10. **How often are you using the concepts and/or techniques you've learned in this project?**

   **A. Personal Level:**

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<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td>7.4%</td>
<td>10.2%</td>
<td>19.4%</td>
<td>35.2%</td>
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   **B. Teaching Level:**

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<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td>0.0%</td>
<td>12.0%</td>
<td>43.5%</td>
<td>24.1%</td>
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11. **Engaging**: To what degree did the trainer(s) and the training activities attract and hold your attention?

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<tr>
<td>Low</td>
<td></td>
<td></td>
<td>0.9%</td>
<td>10.9%</td>
<td>30.9%</td>
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</table>

12. **Understanding**: To what extent did you understand the content and purpose of this project?

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<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td>0.0%</td>
<td>1.9%</td>
<td>26.7%</td>
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</table>

13. **Goals**: To what extent did you establish technology-related goals for yourself based on this project?

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14. **Involvement**: To what extent did you emotionally and mentally involve yourself in the project?

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15. **Recommendation**: Should this project be used as a model for other technology-related programs?

   **A. Training aspect:**

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   **B. Implementation/Installation aspect:**

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Please explain what you feel would be more valuable to you:

Speakers who present activities for all grade levels.
More time to familiarize myself with the programs.
Perhaps a more continuous inservice not so spread out; e.g., once a month; an intense week would be better.
I need to learn more ways to use the lab, more ways to transfer the lab experience in writing to the classroom experience; more flexibility/availability in lab time.

16. The TWO aspects of this project that you value the most are:

a.
The positive way students respond to writing in the labs.
Experienced teachers' presentations.
Facilitates Individualization of Instruction.
Chance to practice on the Mac.
Practice writing lessons and steps to carry out the lesson.
The computer lab was highly organized.
Being allowed to check out the computer.
Composing on the screen after prewriting on paper.
Sharing of curriculum ideas.
Availability of and positive attitude of resource people.
Expert training I received.
Hands on.
Organizing lessons for follow-up computer work.
The excellent lab manager at our school.
Competent presenters.
High morale factor - I am drooling at the prospect of using the lab.
Student productivity.
Introduction to methods of using the computer for writing.
Sharing ideas and concerns/materials.
District's willingness to pay for training employees.
Student fluency in writing.
Easy alignment with the curriculum.
Teacher training prior to the lab experience was invaluable.
Students able to write as a process, independent of the teacher.
The help of the Instructional aide - especially the first few days in the lab.
The clarity of the presentation.
Southwest Jr. Writing Lab and Manual.

b.
Having an excellent aide in the lab.
Improved student interest.
Writing activities to be used in the lab.
The opportunity to have students learn the Mac and then produce writing.
The students enjoyed printing their compositions and poems.
The help of our lab manager.
Use of lab.
Someone was always ready and willing to help.
Great reinforcement, KT activities for students.
Hands-on experience with the computers.
A feeling that the District Office cares and will help (Susan and Carmen).
Enhanced self-worth of students.
Training/Knowledge acquired.
Seeing most of my students engaged in the writing process.
Sharing after implementing.
Assists students in writing term papers.
Student editing ability.
High level of students interest.
The five day lesson plan.
Students being more alert to structure and mechanics of their writing.
Ready made lesson plans lend themselves to improved teacher creativity and greater
freedom in planning writing lessons for students.
Sample student assignments.

17. The type of training or support services you would like to have added or extended for next year includes

More inservice so the teachers will become more familiar.
Specific workshops for junior high level only
Greater emphasis in classroom application to satisfy curriculum objectives.
MacPaint, MacDraw, MacProof.
More support in writing material for high school.
Visual aides.
I would like to see more "prompts" for the students to experiment or choose from.
Troubleshooting day-to-day operations, desktop publishing, and telecommunications.
Teachers need access to these computers for practice; computer lab needs to be open zero hour, after school and lunch for students.
More like "teachers inservicing teachers"
An advanced session - answers to specific questions - learning more programs.
More Inservice on AppleWorks.
More techniques and strategies for writing labs.

Additional Comments and Suggestions:

The support, help, and patience of Mrs. Kourda and Mrs. Munoz have made the computer lab a pleasant and "user friendly" place to be.
I can't say enough about the CVJ Lab Manager. He's knowledgeable, eager to help teachers and students, and has extraordinary rapport with the students. He's great!
Our students have never been so enthusiastic about writing before. Most of them love the Mac Lab.
Applicable activities to be used in lab. Ongoing inservice to learn about other software. Funding should be found for additional training in the fall.
The time and effort everyone has put in has been well worth it - and this is probably an understatement.
Early fall inservice for me and my staff.
Compliments to the whole project for quick implementation this year - I haven't had enough time to properly use the lab due to my own schedule.
I was pleased to have the opportunity to learn!
In my six-years of working at this high school, I have seen many programs come and go, some innovative, others...This is a fantastic project, and it already in the three months of existence in our school, has shown tremendous promise. Thank you for the opportunity!
I love it, the kids love it - they are getting so good!
The lab is superb, and should be made available to every student at every school. I have students who are failing and the only time several of them turn anything in is when they use the computers.
I think you've done a remarkable job as a department in helping to establish so many new labs on site where many of the teachers are not computer-oriented. The first set of lesson plans provide excellent guidelines for plans modified to meet the unique needs of each level of student.
The whole program is great. I'm becoming a computer-holic. Everyday I think of new applications.

THANK YOU FOR YOUR TIME AND ASSISTANCE!
Appendix C

STUDENT EVALUATION

Name of School:

Instructions: We would like to know what you think about working in the writing lab. Please help us evaluate this program. Position the insertion point at the end of each question and begin typing your response. Answer each question sincerely. Your answers will help us improve service to students. Thank you.

You do not need to sign the evaluation.

1. What is your general opinion of the writing lab?
   It's a great idea to let us begin to use computers and teaching us how to use them.
   This lab has great computers that help to learn more about typing. Also to learn several ways of English.
   It's fun and good for school work.
   It is interesting.
   It is a good place to learn.
   I really like it.
   It is useful and interesting work in the lab.
   I think that with the writing lab we can learn to use a computer and at the same time we can do our work faster and easier.
   I think that it is one of the best ways to learn without being boring and also made me feel that I learn better than in the classroom.
   That is a good way of learning how to write, spell and do different things in the lab.
   I am very happy to use this computer.
   My general opinion of the writing lab is that I love being in here; they treat us well.

2. Do you think you will enjoy using the lab to improve your writing skills? Why?
   I want to improve my writing skills.
   Yes, because the computer can help you correct the mistakes you make.
   Yes, I think I can learn about this computer.
   Yes, because I need to improve my writing skills.
   I think I can do better using it and having fun than just writing on a paper.
   Yes, because when I use a computer I like to improve my typing.
   Yes, because this way we have more opportunity to practice our writing. Because the computer is always helping you.
   It's OK, but with music I think it will be better.
   Yes, I do think I will improve my writing skills because coming to the lab helps me a lot.
   When I make a mistake the computer helps me to correct it. It also doesn't make it mad with me.
Yes, because it can help you pass the writing test.
Yes, because I can correct my mistakes.

3. What have you learned during this introductory week?
I've learned how to save a program and how to look thinks up and typing.
Pay attention to the teacher.
A lot of things I didn't know about that are helpful for me.
How to type a little without mistakes.
How to use Thunder.
I learned how to use a Macintosh computer with a data disk for myself.
Work with computers and spell words.
I learned to print to do letters and stuff like that.
I have learned the basic way to operate the computer.
How to use a computer, the parts of the computer, the system like
dictionary and correct letters.
How to write a paragraph and how to get a blank screen so we can write
our own letter.
How to write poems and use the Macintosh.
I have learned how to use the dictionary, how to use the computer, the
parts of the computer, how to correct and make letters.
That the computer is the most wonderful thing especially the Macintosh SE.

4. Have you used a computer for writing before? Most responded "No, never."
Where? Typing, Sunset School, Middle School, San Ysidro Middle School,
Japan, Mar Vista Middle, Sweetwater High, Southwest High.
What type of computer was it? Most responded Apple Ile

5. What are your suggestions for improving the introductory lessons?
My suggestions are that I utilize a computer for my homework or other
skills.
None.
Enjoy games and writing letters.
My suggestion is to give more specific instructions to the students so
they can learn more quickly.
That we could have more time to practice in the computers, because we
never have enough time to practice the things that we are learning.
The lessons were well explained.
I think that the way it is, is a good way to introduce lessons.
Have more aides in the lab so everybody get to learn to use the Macintosh
computer.
Spend more time in the computer lab.
I think that you need to give a piece of paper with the lesson; it could be a
good idea.
To do the best you can and don't be afraid to do errors because everyone
does errors.
I think the method we have using is fine for the people that never have
used computers before, because we can learn all the steps carefully.